



Pursuant to S.D.N.Y. Local Civil Rule 56.1(b), Plaintiff Realtime Data, LLC d/b/a/ IXO (“Realtime”) respectfully submits its response to Defendants’ Statement of Undisputed Material Facts in Support of Defendants’ Memorandum of Law in Support of Motion for Partial Summary Judgment of Invalidity of the Patents-in-Suit for Failure to Satisfy the Definiteness and Written Description Requirements of 35 U.S.C. § 112 (“Defendants’ Statement of Undisputed Facts”).

Pursuant to Local Rule 56.1(b), Realtime hereby responds to Defendants’ Statement of Undisputed Facts, which are set forth below for the convenience of the Court, as follows:

1. U.S. Patent No. 7,714,747 (“the ‘747 patent”), titled “Data Compression Systems and Methods,” was filed on January 8, 2007 and issued by the PTO on May 11, 2010. The ‘747 patent identifies an application filed in 1998 under the heading “Related U.S. Application Data.” Ex. A, ‘747 Patent.

**Realtime’s Response**

Admitted for purposes of this motion. The ‘747 patent also identifies other applications under “Related U.S. Application Data.” (Melman Decl. Ex. B, ‘747 patent.)

2. U.S. Patent 7,777,651 (“the ‘651 Patent”), titled “System and Method for Data Feed Acceleration and Encryption,” was filed on June 2, 2008 and issued August 17, 2010. The ‘651 patent identifies an application filed in 2000 under the heading “Related U.S. Application Data.” Ex. B, ‘651 Patent.

**Realtime’s Response**

Admitted for purposes of this motion. The ‘651 patent also identifies other applications under “Related U.S. Application Data.” (Melman Decl. Ex. A, ‘651 patent.)

3. Realtime asserts that the ‘747 patent has priority to a patent application originally filed on October 29, 2001. Realtime’s Opening Markman Br. at 1.

**Realtime’s Response**

Admitted for purposes of this motion.

4. Realtime asserts that the '651 patent has priority to the May 7, 2003 patent application that led to U.S. Patent No. 7,417,568. Realtime's Opening Markman Br. at 1.

**Realtime's Response**

Admitted for purposes of this motion.

5. Realtime has taken the position that the alleged inventions of the asserted claims can claim priority back to applications filed "no later than 2001." Realtime's Opening Markman Br. at 1.

**Realtime's Response**

Disputed. In its opening Markman brief, Realtime stated, "Each of the patents-in-suit also claims priority to earlier Realtime patent applications filed no later than October 3, 2001." (Realtime's Opening Markman Br. at 1.)

6. The '651 patent discusses decompression at col. 6, line 66 through col. 7, line 61.

**Realtime's Response**

Admitted for purposes of this motion. The '651 patent also discusses decompression (and decoding, which is the same as decompression (Shamos Decl. ¶ 5)) in at least the following other places: Abstract, Figure 2, Figure 3, Figure 6, 1:19-30, 3:14-30, 5:24-37; 6:8-14, 6:49-65, 7:65-8:5, 8:50-57, 8:64-9:3, 9:42-10:24, 10:44-11:13, 11:51-12:67, 13:34-14:3, 14:35-63, 16:66-18:12, 18:30-41, 18:66-19:11, 22:28-43, 22:64-23:7. ('651 patent.)

7. The '747 patent discusses decompression at col. 14, line 39 through col. 15, line 49.

**Realtime's Response**

Admitted for purposes of this motion. The '747 patent also discusses decompression (and decoding, which is the same as decompression (Shamos Decl. ¶ 5)) in at least the following other places: Figure 1, Figure 11, Figure 12, 1:19-22, 2:6-2:13, 2:36-49, 3:4-20, 3:43-46, 6:14-36, 14:39-15:49.

8. When the '747 patent application was filed on January 8, 2007, the inventors described the invention as follows

“The present invention is directed to systems and methods for providing fast and efficient data *compression* using a combination of content independent data *compression* and content dependent data *compression*.” ‘747 Patent, col. 3:43-46. (emphasis added).

**Realtime’s Response**

Disputed. When the '747 patent application was filed on January 8, 2007, the inventors described their inventions in the entire '747 patent application. ('747 patent.)

9. The specification of the '747 patent never uses the term “content dependent data decompression.” See Ex. A, '747 Patent.

**Realtime’s Response**

Disputed. The '747 patent specification uses the term “content dependent data decompression.” The '747 patent states, “The present invention relates generally to a data compression and decompression and, more particularly, to systems and methods for data compression using content independent and *content dependent data* compression and *decompression*.” ('747 patent col. 1 ln. 19-22 (emphasis added).) The '747 patent also states, “The present invention is directed to systems and methods for providing data compression and decompression using content independent and *content dependent data* compression and *decompression*.” ('747 patent col. 6, ln. 13-16 (emphasis added).) The phrase “content dependent data compression and decompression” includes the term “content dependent data decompression.”

10. The specification of the '651 patent never uses the term “content dependent data decompression.” See Ex. B, '651 Patent.

**Realtime's Response**

Disputed. The '651 patent specification uses the term "content dependent data decompression." The '651 patent refers to "content-dependent compression and decompression," which logically contains the term "content dependent data decompression." ('651 patent col. 13 ln. 57.) The '651 patent also states, "In this embodiment, the content-dependent scheme is used as the primary compression/decompression system," which logically contains the term "content dependent data decompression." ('651 patent col. 14 ln. 39-42.) The '651 patent also refers to "content-dependent compression/decompression," which logically contains the term "content dependent data decompression." ('651 patent col. 14 ln. 51.).

In addition, the '651 patent expressly incorporates by reference U.S. Patent Application No. 10/016,355 (Melman Decl. Ex. C) (*see* '651 patent col. 6 ln. 16-22), which shares the same specification as the '747 patent. As discussed in response to paragraph 9, the '747 patent specification uses the term "content dependent data decompression" in at least two places. ('747 patent col. 1 ln. 19-22, col. 6, ln. 13-16.)

11. The specification of the '747 patent only once uses the term "content independent data decompression." *See* Ex. A, '747 Patent, col. 5:45-47 (noting that Figure 11 "is a block diagram of a content independent data decompression system").

**Realtime's Response**

Disputed. The '747 patent specification does not only use the term "content independent data decompression" at column 5 lines 45-47. The '747 patent also states, "The present invention relates generally to a data compression and decompression and, more particularly, to systems and methods for data compression using *content independent* and content dependent *data* compression and *decompression*." ('747 patent col. 1 ln. 19-22 (emphasis added).) In addition, the '747 patent states, "The present invention is directed to systems and methods for

providing data compression and decompression using *content independent* and content dependent *data* compression and *decompression*.” (‘747 patent col. 6 ln. 13-16 (emphasis added).) The phrase “content independent and content dependent data compression and decompression” includes the term “content independent data decompression.”

12. The specification of the ‘651 patent only once uses the term “content independent data decompression.” *See* Ex. B, ‘651 Patent, col. 5:66-67 (noting that Figure 6 of the ‘651 patent “is a diagram of a system/method for providing content independent data decompression”).

### **Realtime’s Response**

Disputed. The ‘651 patent specification does not only use the term “content independent data decompression” at column 5 lines 66-67. The ‘651 patent also states, “In this embodiment, the content-dependent scheme is used as the primary compression/decompression system and the content-independent scheme is used in place of, or in conjunction with, the content dependent scheme,” which logically contains the term “content independent data decompression.” (‘651 patent col. 14 ln. 39-42.)

In addition, the ‘651 patent expressly incorporates by reference U.S. Patent Application No. 10/016,355 (‘651 patent col. 6 ln. 16-22), which shares the same specification as the ‘747 patent. As discussed in response to paragraph 11, the ‘747 patent specification uses the term “content independent data decompression” in at least two places. (‘747 patent col. 1 ln. 19-22, col. 6, ln. 13-16.)

13. The word “decompression” does not appear in the “Summary of the Invention” of the ‘747 patent. *See* Ex. A, ‘747 Patent, col. 3:40-5:2.

**Realtime's Response**

Admitted for purposes of this motion. However, not including the claims, the word “decompression” appears in at least 18 places in the ‘747 patent. (‘747 patent; Shamos Decl. ¶ 9.)

14. As shown in Figure 13A of the ‘747 patent, “if a data type of the data block is identified,” a “content dependent data compression” procedure is used (*Id.* at col. 3:53-54,4:46-47; *see also id.* at col. 28:36-44); the recognized data block is sent to, and if possible is encoded by, what are believed to be the appropriate ones of the system’s “D” encoders. *See id.* at col. 16:12-39.

**Realtime's Response**

Disputed. Defendants attempt to summarize Figure 13A, which is “an embodiment of the present invention.” (‘747 patent col. 5 ln. 52-55.) However, Figure 13A is fully described in the ‘747 patent at column 15 line 50 to column 17 line 60. (‘747 patent col. 15 ln. 50 - col. 17 ln. 60.)

15. If the system cannot identify the type of a block of data to be transmitted, a “content independent data compression” procedure is used. *See Ex. A*, ‘747 Patent, col. 3:55-56, 4:53-54); the unrecognized data block is sent to, and if possible encoded by, each of the system’s “E” encoders. *See id.* at col. 8:10-12, 9:57-59,11:7-9.

**Realtime's Response**

Disputed. Defendants’ statements conflate the “Summary of the Invention” section of the ‘747 patent with specific disclosed embodiments. Realtime’s inventions, including its invented systems, are described in the entire ‘747 patent. (‘747 patent.) Moreover, the ‘747 patent does not use the term “procedure.” (‘747 patent.)

16. An encoder may include multiple encoding or compression algorithms, each of which is capable of encoding or compressing an unencoded or uncompressed data block. Declaration of James Storer (“Storer Decl.”) ¶44.

**Realtime's Response**

Admitted for purposes of this motion.

17. Figure 13A of the '747 patent shows that there are different data flows for potentially compressing data blocks whose content type is recognized by the system and data blocks whose content type is not recognized by the system (i.e., the "yes" and "no" paths following the determination made in block 1300). Ex. A, '747 Patent, FIG 13A.

**Realtime's Response**

Disputed. Defendants attempt to summarize Figure 13A and limit the invention of the '747 patent to that figure, which is merely "an embodiment of the present invention." ('747 patent col. 5 ln. 52-55.) However, Figure 13A is fully described in the '747 patent at column 15 line 50 to column 17 line 60. ('747 patent col. 15 ln. 50 - col. 17 ln. 60.)

18. After the encoding process, the system described in the '747 patent determines what level of compression (i.e., "compression ratio") was achieved by each encoder that was able to encode the data block, as shown in Figure 13B below. Ex. A, '747 Patent, col. 18:24-39.

**Realtime's Response**

Disputed. Defendants attempt to summarize Figure 13B and limit the invention of the '747 patent to that figure, which is merely "an embodiment of the present invention." ('747 patent col. 5 ln. 52-55.) However, Figure 13B is fully described in the '747 patent at column 15 line 50 to column 17 line 60. ('747 patent col. 15 ln. 50 - col. 17 ln. 60.)

19. Block 1340 of Figure 13B of the '747 patent shows that the system determines the compression ratio regardless of whether the data block is encoded by the content dependent "D" encoders or by the content independent "E" encoders. Ex. A, '747 Patent, FIG 13B.

**Realtime's Response**

Disputed. Defendants attempt to summarize Figure 13B and limit the invention of the '747 patent to that figure, which is merely "an embodiment of the present invention." ('747



patent col. 5 ln. 52-55.) However, Figure 13B is fully described in the '747 patent at column 15 line 50 to column 17 line 60. ('747 patent col. 15 ln. 50 - col. 17 ln. 60.)

20. The system of the '747 patent determines what level of compression was achieved by each "D" or "E" encoder that was able to compress a data block, and outputs the compressed data with an appropriate "descriptor." Ex. A, '747 Patent, col. 18:46-19:7.

**Realtime's Response**

Disputed. Defendants attempt to summarize Figures 14A-14D and limit the invention of the '747 patent to those figures, which are merely "flow diagram[s] . . . according to one aspect of the present invention." ('747 patent col. 5 ln. 56-59.) However, Figures 14A-14D are fully described in the '747 patent at column 17 line 61 to column 20 line 36. ('747 patent col. 17 ln. 61 - col. 20 ln. 36.)

21. The type of descriptor the system appends to a data block depends on whether a desired level of compression was achieved, as also shown in Figure 14C. *See also* Ex. A, '747 Patent, col. 18:46-18:63.

**Realtime's Response**

Disputed. Defendants attempt to summarize Figures 14C and limit the invention of the '747 patent to that figure, which is merely a "flow diagram . . . according to one aspect of the present invention." ('747 patent col. 5 ln. 56-59.) However, Figure 14C is fully described in the '747 patent at column 17 line 61 to column 20 line 36. ('747 patent col. 17 ln. 61 - col. 20 ln. 36.)

22. If a desired "threshold" level of compression is achieved, the system appends an "encoding descriptor" (block 1424 in Figure 14C) to the most highly compressed data block to indicate what compression algorithm was used to achieve that level of compression. *Id.*

**Realtime's Response**

Disputed. Defendants attempt to summarize Figures 14C and limit the invention of the '747 patent to that figure, which is merely a "flow diagram . . . according to one aspect of the present invention." ('747 patent col. 5 ln. 56-59.) However, Figure 14C is fully described in the '747 patent at column 17 line 61 to column 20 line 36. ('747 patent col. 17 ln. 61 - col. 20 ln. 36.)

23. The descriptor identifies what compression algorithm was used to compress the data block. "A data compression type descriptor is defined as any recognizable data token or descriptor that indicates which data encoding technique has been applied to the data." Feit Decl., Ex. A, '747 Patent, col. 18:63-66.

**Realtime's Response**

Disputed. Defendants attempt to summarize Figures 14A-14D and limit the invention of the '747 patent to those figures, which are merely "flow diagram[s] . . . according to one aspect of the present invention." ('747 patent col. 5 ln. 56-59.) However, Figures 14A-14D are fully described in the '747 patent at column 17 line 61 to column 20 line 36. ('747 patent col. 17 ln. 61 - col. 20 ln. 36.)

In addition, Defendants mischaracterize the disclosure of the '747 patent, which states, "A data compression type descriptor is defined as any recognizable data token or descriptor that indicates which data encoding technique has been applied to the data," but does not state that "[t]he descriptor identifies what compression algorithm was used to compress the data block." ('747 patent col. 18 ln. 63-66.) Further, the '747 patent also states, in discussing another embodiment (Figure 2), that "[a] description module 60, operatively coupled to the compression ratio module 50, appends a corresponding compression type descriptor to each encoded data block which is selected for output so as to indicate the type of compression format of the encoded data block." ('747 patent col. 7 ln. 62-67.)

24. The descriptor does not identify what particular encoder was used or whether the encoder using that algorithm was a “D” or “E” encoder. *See, e.g.*, Feit Decl., Ex. A, ‘747 Patent, col. 16:25-39 (describing “content dependent” compression); *id.* at col. 16:40-53 (describing “content independent” compression).

### **Realtime’s Response**

Disputed. Defendants attempt to summarize Figures 13A-13B and limit the invention of the ‘747 patent to those figures, which are merely “an embodiment of the present invention.” (‘747 patent col. 5 ln. 52-55.) However, Figures 13A-13B are fully described in the ‘747 patent at column 15 line 50 to column 17 line 60. (‘747 patent col. 15 ln. 50 - col. 17 ln. 60.)

In addition, Defendants mischaracterize the disclosure of the ‘747 patent. The ‘747 patent teaches, in multiple places, that “[a] data compression type descriptor is defined as any recognizable data token or descriptor that indicates which data encoding technique has been applied to the data.” (*See, e.g.*, ‘747 patent col. 8 ln. 53-56.) The ‘747 patent also describes categories of encoding techniques such as lossy and lossless or content dependent and content independent, which categories may include multiple specific algorithms. Fig. 13A shows this clearly when it identifies boxes 1320 and 30, each of which has multiple specific algorithms within the category of Content Dependent Encoders (what Defendants call “D” encoders) or Content Independent Encoders (what Defendants call “E” encoders). Nothing in the ‘747 patent forbids the descriptor from indicating whether content dependent compression (“D” encoding) or content independent compression (“E” encoding) was used. (Shamos Decl. ¶ 11.)

25. “D” and “E” encoders can use the same encoding techniques, “such as run length, Huffman, Lempel-Ziv Dictionary Compression, arithmetic coding, data compaction, and data null suppression.” Feit Decl., Ex. A, ‘747 Patent, col. 3:3-7; 14:63-67

**Realtime's Response**

Disputed. Defendants' statement conflates a description of prior art (the "Chu" reference) ('747 patent col. 3 ln. 3-7) with a description of a particular disclosed embodiment of the '747 patent (Figure 11) ('747 patent col. 14 ln. 63-67). Also, "E" encoders are not described in either portion of the '747 patent that Defendants cite.

In addition, Defendants attempt to summarize Figure 11 and limit the invention of the '747 patent to that figure, which is merely "one embodiment of the present invention." ('747 patent col. 5 ln. 45-47.) However, Figure 11 is fully described in the '747 patent at column 14 line 39 to column 15 line 10. ('747 patent col. 14 ln. 39 - 15 ln. 10.)

26. If "there are no encoded data blocks having a [sufficiently high] compression ratio," then a different type of descriptor is used. The appended descriptor is a "null compression type" descriptor "that indicates that no data encoding has been applied to the input data block." And "the original **unencoded** input data block is selected for output." *See, e.g.* Feit Decl., Ex. A, '747 Patent, col. 8:34-47 (emphasis added)

**Realtime's Response**

Disputed. Defendants attempt to summarize Figures 3A and 3B and limit the invention of the '747 patent to those figures, which merely illustrate "a data compression method according to one aspect of the present invention." ('747 patent col. 5 ln. 12-15.) However, Figures 3A and 3B are fully described in the '747 patent at column 8 line 1 to column 9 line 21. ('747 patent col. 8 ln. 1 - col. 9 ln. 21.)

27. "A descriptor extraction module receives the ... input data block ... [and] *use[s] methods known to those skilled in the art* to extract the data type compression type descriptor associated with the data block." Feit Decl., Ex. A, '747 Patent, col. 14:49-54.

**Realtime's Response**

Disputed. Defendants attempt to summarize Figure 11 and limit the invention of the '747 patent to that figure, which is merely "one embodiment of the present invention." ('747 patent

col. 5 ln. 45-47.) However, Figure 11 is fully described in the ‘747 patent at column 14 line 39 to column 15 line 10. (‘747 patent col. 14 ln. 39 - col. 15 ln. 10.)

28. If the received data block was encoded, “the data compression type descriptor is determined to be any value other than null ..., [and] the corresponding decoder or decoders are then selected.” *Id.*

#### **Realtime’s Response**

Disputed. Defendants attempt to summarize Figure 12 (quoting ‘747 patent col. 15 ln. 27-30) and limit the invention of the ‘747 patent to that figure, which merely illustrates “a decompression method according to one aspect of the present invention.” (‘747 patent col. 5 ln. 48-51.) However, Figure 12 is fully described in the ‘747 patent at column 15 lines 11 to 49. (‘747 patent col. 15 ln. 11-49.)

29. According to claims 1 and 8 of the ‘747 patent and claim 1 of the ‘651 patent, the selection of the decoder to be used to decompress a particularly compressed data block is “based on the descriptor.” Feit Decl., Ex. A, ‘747 Patent, Figure 11, 12; Feit Decl., Ex. B, ‘651 Patent, Figure 6.

#### **Realtime’s Response**

Disputed. Defendants mischaracterize claims 1 and 8 of the ‘747 and claim 1 of ‘651 patent, and use language that is not found in those claims. (‘747 patent claims 1, 8; ‘651 patent claim 1.) In support of their mischaracterization, Defendants cite to Figures 11 and 12 of the ‘747 patent and Figure 6 of the ‘651 patent, and attempt to limit Realtime’s inventions to those figures, which are merely single or exemplary embodiments of the inventions. (‘747 patent col. 5 ln. 45-51; ‘651 patent col. 16 ln. 66-67.)

30. The system of the patents have only one set of decoders. *See* Feit Decl., Ex. A, ‘747 Patent, Fig. 11; ‘651 Patent, Fig. 6

**Realtime's Response**

Disputed. Defendants attempt to limit the invention of the '747 patent to Figure 11, which is merely "one embodiment of the present invention" ('747 patent col. 5 ln. 45-47). In addition, Defendants attempt to limit the invention of the '651 patent to Figures 6, which is merely "an exemplary decompression system that may be employed." ('651 patent col. 16 ln. 66 - col. 17 ln. 1.)

31. A decoder may include multiple encoding or compression algorithms, each of which is capable of decoding or decompressing an encoded or compressed data block. Declaration of James Storer ("Storer Decl.") at ¶44.

**Realtime's Response**

Disputed. Decoders do not include encoding or compression algorithms. Decoders include one or more decoding or decompression algorithms to reverse the effect of the encoding or compression algorithms. (Shamos Decl. ¶ 11.)

32. "If the data compression type descriptor is determined to be null," then the data block was not compressed and **no decoding** is applied to the input data block and the original unencoded data block is output." Feit Decl., Ex. A, '747, col. 15:22-30 (emphasis added).

**Realtime's Response**

Disputed. Defendants attempt to summarize Figure 12 and limit the invention of the '747 patent to that figure, which merely illustrates "a decompression method according to one aspect of the present invention." ('747 patent col. 5 ln. 48-51.) However, Figure 12 is fully described in the '747 patent at column 15 lines 11 to 49. ('747 patent col. 15 ln. 11-49.)

33. Neither the algorithm nor the descriptor indicates whether the compression algorithm was identified using a "content dependent data compression" procedure (i.e., was an algorithm used by one of the "D" encoders) or "content independent data compression" procedure (i.e., was an algorithm used by one of the "E" encoders). Feit Decl., Ex. A, '747 Patent, col. 18:63-66.

**Realtime's Response**

Disputed. The descriptor “indicates which data encoding technique has been applied to the data.” (*See, e.g.*, ‘747 patent col. 8 ln. 53-56.) “Content dependent data compression” (what Defendants call “D” encoders) and “content independent data compression” (what Defendants call “E” encoders) are such techniques, as are particular compression algorithms. (Shamos Decl. ¶¶ 11, 18.) As expressly claimed in the ‘747 patent, “the descriptor indicates that the data block is encoded utilizing content dependent data compression” and “the descriptor indicates that the data block is encoded utilizing content independent data compression.” (*See, e.g.*, ‘747 patent claim 1; *see also* ‘651 patent claim 1.)

In addition, Defendants attempt to summarize Figures 14A-14D and limit the invention of the ‘747 patent to those figures, which are merely “flow diagram[s] . . . according to one aspect of the present invention.” (‘747 patent col. 5 ln. 56-59.) However, Figures 14A-14D are fully described in the ‘747 patent at column 17 line 61 to column 20 line 36. (‘747 patent col. 17 ln. 61 - col. 20 ln. 36.)

34. Both a data block that was compressed using an algorithm found using a “content dependent data compression” procedure and one compressed using an algorithm found using a “content independent data compression” procedure may have been encoded using the same algorithm, e.g., a Huffman, Lempel-Ziv Dictionary Compression, arithmetic coding, data compaction, or data null suppression compression algorithms. Feit Decl., Ex. A, ‘747 Patent, col. 3:3-7; 14:63-67.

**Realtime's Response**

Disputed. Defendants’ statement conflates a description of prior art (the “Chu” reference) (‘747 patent col. 3 ln. 3-7) with a description of a particular disclosed embodiment of the ‘747 patent (Figure 11) (‘747 patent col. 14 ln. 63-67). Also, “content independent data compression” algorithms are not described in either portion of the ‘747 patent that Defendants cite.

In addition, Defendants attempt to summarize Figure 11 and limit the invention of the '747 patent to that figure, which is merely "one embodiment of the present invention." ('747 patent col. 5 ln. 45-47.) However, Figure 11 is fully described in the '747 patent at column 14 line 39 to column 15 line 10. ('747 patent col. 14 ln. 39 - col. 15 ln. 10.)

35. The descriptor does not indicate whether the encoder having that algorithm was selected based on whether the system did or did not recognize the type of data to be compressed. Storer Decl. ¶ 24.

**Realtime's Response**

Disputed. If the descriptor indicates that "content dependent data compression" was used, then the system recognized the nature of the content of the data to be compressed. If the descriptor indicates that "content independent data compression" was used, then the system did not recognize the nature of the content of the data to be compressed. (Shamos Decl. ¶¶ 11-12, 18.)

36. The phrase "content independent data decompression" is not a term with a known meaning to persons of skill in the field of data compression. Storer Decl. ¶ 34.

**Realtime's Response**

Disputed. In the context of the asserted patents, the phrase "content independent data decompression" has a readily understandable meaning to persons of skill in the field of data compression. It is the reverse of "content independent data compression." (Shamos Decl. ¶¶ 15-18.)

37. The phrase "content dependent data decompression" is not a term with meaning to persons of skill in the field of data compression. *Id.*



**Realtime's Response**

Disputed. In the context of the asserted patents, the phrase “content dependent data decompression” has a readily understandable meaning to persons of skill in the field of data compression. It is the reverse of “content dependent data compression.” (Shamos Decl. ¶¶ 15-18.)

38. The correct data decompression algorithm is not determined based on whether “content dependent data compression” or “content independent data compression” were previously used to compress the data. Feit Decl., Ex. A, ‘747 Patent, col. 18:36-66, FIG14A.

**Realtime's Response**

Disputed. In the context of the decompression claims at issue here, the data decompression algorithm is determined based on whether “content dependent data compression” or “content independent data compression” was used to encode the data. If content dependent data compression was used to encode the data, then content dependent data decompression is used to decode it. If content independent data compression was used to encode the data, then content independent data decompression is used to decode it. (Shamos Decl. ¶¶ 15-18.)

In addition, Defendants attempt to summarize Figure 14A and limit the invention of the ‘747 patent to that figure, which is merely a “flow diagram . . . according to one aspect of the present invention.” (‘747 patent col. 5 ln. 56-59.) However, Figure 14A is fully described in the ‘747 patent at column 17 line 61 to column 20 line 36. (‘747 patent col. 17 ln. 61 - col. 20 ln. 36.)

39. The decompression algorithm used to decode or decompress data must include the reverse of the algorithm that was used to encode or compress the data. Storer Decl. ¶ 32.

**Realtime's Response**

Admitted for purposes of this motion.

40. The descriptor described in the '747 patent does not indicate whether a "content dependent data compression" or a "content independent data compression" procedure was employed to find the compression algorithm that eventually was actually used to compress the data block. Feit Decl., Ex. A, '747 Patent, col. 18:63-66.

#### **Realtime's Response**

Disputed. The descriptor described in the '747 patent "indicates which data encoding technique has been applied to the data." (*See, e.g.*, '747 patent col. 8 ln. 53-56.) "Content dependent data compression" and "content independent data compression" are such techniques, as are particular compression algorithms. (Shamos Decl. ¶¶ 11, 18.) As expressly claimed in the '747 patent, "the descriptor indicates that the data block is encoded utilizing content dependent data compression" and "the descriptor indicates that the data block is encoded utilizing content independent data compression." (*See, e.g.*, '747 patent claim 1.)

In addition, Defendants attempt to summarize Figures 14A-14D and limit the invention of the '747 patent to those figures, which are merely "flow diagram[s] . . . according to one aspect of the present invention." ('747 patent col. 5 ln. 56-59.) However, Figures 14A-14D are fully described in the '747 patent at column 17 line 61 to column 20 line 36. ('747 patent col. 17 ln. 61 - col. 20 ln. 36.)

41. The descriptor does not indicate whether a "D" or an "E" encoder applied the compression algorithm that provided the highest level of compression of a data block output to the decoder. Storer Decl. ¶ 24.

#### **Realtime's Response**

Disputed. The descriptor "indicates which data encoding technique has been applied to the data." (*See, e.g.*, '747 patent col. 8 ln. 53-56.) "Content dependent data compression" (what Defendants call "D" encoders) and "content independent data compression" (what Defendants call "E" encoders) are such techniques, as are particular compression algorithms. (Shamos Decl.

¶¶ 11, 18.) As expressly claimed in the ‘747 patent, “the descriptor indicates that the data block is encoded utilizing content dependent data compression” and “the descriptor indicates that the data block is encoded utilizing content independent data compression.” (*See, e.g.*, ‘747 patent claim 1; ‘651 patent claim 1.)

42. “If the data compression type descriptor is determined to be null, ... then no decoding is applied to the input data block and the original undecoded data block is output.” *See* Feit Decl., Ex. A, ‘747 Patent, col. 15:22-25.

#### **Realtime’s Response**

Disputed. Defendants attempt to summarize Figure 12 and limit the invention of the ‘747 patent to that figure, which merely illustrates “a decompression method according to one aspect of the present invention.” (‘747 patent col. 5 ln. 48-51.) However, Figure 12 is fully described in the ‘747 patent at column 15 lines 11 to 49. (‘747 patent col. 15 ln. 11-49.)

43. The specification states that the decompression algorithm applied to a compressed data block is selected based on the compression technique identified by the descriptor. Feit Decl., Ex. A, ‘747 Patent, FIG 12, col. 14:39-15:49, 18:63-66.

#### **Realtime’s Response**

Disputed. Defendants attempt to summarize Figures 11, 12 and 14A-14D and limit the invention of the ‘747 patent to those figures, which are merely single embodiments of the invention. (‘747 patent col. 5 ln. 45-51, 56-59.) However, Figures 11, 12 and 14A-14D are fully described in the ‘747 patent at column 14 line 39 to column 15 line 49 and column 17 line 61 to column 20 line 36. (‘747 patent col. 14 ln. 39 - col. 15 ln. 49, col. 17 ln. 61 - col. 20 ln. 36.)

44. A single decoder may use any one of a number of decompression techniques, i.e. decompression algorithms or methods. Similarly, a single encoder may use any one of a number of algorithms or methods to compress or encode a data block. Storer Decl. ¶ 44.

**Realtime's Response**

Admitted for purposes of this motion.

45. One of ordinary skill in the art would understand that a lossless decoder that decompresses a compressed data block utilizes an algorithm that is substantially the reverse of the algorithm used to compress the data in the uncompressed data block. Storer Decl. ¶ 48.

**Realtime's Response**

Admitted for purposes of this motion.

46. Examining a data block to determine if an encoder system identifies the type of data in the data block does not compress any data in the data block. Storer Decl. ¶¶ 20-22, 36, Feit Decl., Ex. A, '747 Patent, FIG. 14A.

**Realtime's Response**

Disputed. Defendants attempt to summarize Figure 14A and limit the invention of the '747 patent to that figure, which is merely a "flow diagram . . . according to one aspect of the present invention." ('747 patent col. 5 ln. 56-59.) However, Figure 14A is fully described in the '747 patent at column 17 line 61 to column 20 line 36. ('747 patent col. 17 ln. 61 - col. 20 ln. 36.)

47. Sending to an encoder a data block the type of data in which has been identified by an encoder system does not compress any data in the data block. Storer Decl. ¶¶ 20-22, 36. Feit Decl., Ex. A, '747 Patent, col. 8:9-11, FIG. 14A.

**Realtime's Response**

Disputed. Defendants attempt to summarize Figures 3A-3B and Figure 14A and limit the invention of the '747 patent to those figures, which merely illustrate methods "according to one aspect of the present invention." ('747 patent col. 5 ln. 12-15, 56-59.) However, Figures 3A-3B and Figure 14A are fully described in the '747 patent at column 8 line 1 to column 9 line 21 and

column 17 line 61 to column 20 line 36. ('747 patent col. 8 ln. 1 - col. 9 ln. 21, col. 17 ln. 61 - col. 20 ln. 36.)

48. Sending to an encoder a data block the type of data in which has not been identified by an encoder does not compress any data in the data block. Storer Decl. ¶ 20-22, 36. Feit Decl., Ex. A, '747 Patent, col.16:21-24. FIG. 14A.

#### **Realtime's Response**

Disputed. Defendants attempt to summarize Figures 13A-13B and Figure 14A and limit the invention of the '747 patent to those figures, which are merely single embodiments of the invention. ('747 patent col. 5 ln. 52-59.) However, Figures 13A-13B and Figure 14A are fully described in the '747 patent at column 15 line 50 to column 20 line 36. ('747 patent col. 15 ln. 15 - col. 20 ln. 36.)

49. "Content dependent data compression" and "content independent data compression" are not compression techniques or algorithms. Storer Decl. ¶ 36.

#### **Realtime's Response**

Disputed. "Content dependent data compression" and "content independent data compression" are compression techniques or algorithms. (Shamos Decl. ¶ 10.) The decompression claims at issue here include the limitation "compressing the data block with a selected encoder utilizing content dependent data compression, if the data block type is recognized as associated with a lossless encoder utilizing content dependent data compression." ('747 patent claim 1.) Thus, the plain language of the claims makes clear that "content dependent data compression" is a technique for compressing data. (Shamos Decl. ¶ 10.)

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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

The undersigned certifies that true and correct copies of the foregoing document were served via email to all counsel of record on April 18, 2012.

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